

FY 2016 WINDOW SERVICE COSTS BY SHAPE

I. PREFACE

A. Purpose and Content

USPS-FY16-20 documents the development of window service volume-variable costs by shape for market dominant Presorted First-Class Mail, Standard Mail Regular, and Standard Mail ECR. It contains printed and electronic documentation of the spreadsheets and programs used to develop these costs.

B. Predecessor Documents

Docket No. R2006-1, USPS-LR-L-106.
Docket No. ACR 2007, USPS-FY07-20.
Docket No. ACR 2008, USPS-FY08-20.
Docket No. ACR 2009, USPS-FY09-20.
Docket No. ACR 2010, USPS-FY10-20.
Docket No. ACR 2011, USPS-FY11-20.
Docket No. ACR 2012, USPS-FY12-20.
Docket No. ACR 2013, USPS-FY13-20.
Docket No. ACR 2014, USPS-FY14-20.
Docket No. ACR 2015, USPS-FY15-20.

C. Corresponding Non-Public Document

There is no corresponding non-public document.

D. Methodology

This analysis uses the same methodology as described in Docket No. R2006-1, USPS-LR-L-106. This methodology was also used in Docket No. ACR2015, USPS-FY15-20, and predecessor documents provided with the 2008 through 2014 Annual Compliance Reports.

E. Input/Output

USPS-FY16-20 relies upon the 2016 IOCS data set in USPS-FY16-NP21 and replicates cost distribution and cost pool assignment methodology in USPS-FY16-7. It also relies upon window service piggyback factors as developed in USPS-FY16-24, and ECR adjustment factors and volume inputs from USPS-FY16-26.

II. ORGANIZATION

The main results are presented in the Microsoft Office Excel workbook 'FY16 Window Service Costs.xls' in the worksheet 'FY16 Adj Costs.' These results are also reported in Table 1, below. Data sources are referenced in each spreadsheet in the Microsoft Office Excel workbook 'FY16 Window Service Costs.xls.' The programs and workbooks used to estimate these costs are described in the Program Documentation section below.

Table 1
FY 2016 Window Service (C/S 3.2) Costs (\$000)

Subclass	Shape	FY16 Costs	FY16 Piggyback Factor *	Adj FY16 Costs
First-Class Presort	Letters	17,696	1.3949	24,685
	Flats	1,171	1.3949	1,633
	Total	18,867		26,318
Standard ECR - High Density/Saturation	Letters	1,284	1.3949	1,791
	Flats	1,051	1.3949	1,465
	Parcels	0	1.3949	0
	Total	2,334		3,256
Standard ECR - Carrier Route	Letters	216	1.3949	302
	Flats	1,431	1.3949	1,997
	Parcels	0	1.3949	0
	Total	1,648		2,298
Standard Mail Regular	Letters	52,892	1.3949	73,780
	Flats	5,004	1.3949	6,980
	Parcels	248	1.3949	347
	Total	58,144		81,106

* Source: USPS-FY16-24; FY16Public.PB.xls, worksheet 'PBRatios'

III. PROGRAM DOCUMENTATION

1. Computer Hardware and Software

The FORTRAN programs are run on a HP ProLiant DL560 Gen 8 with four Intel Xeon E5-4650 (each with 8 cores @ 2.70GHz) microprocessors and 256 GB of RAM. The operating system on this computer is Red Hat Enterprise Linux Server release 6.8 (Santiago) with the kernel 2.6.32-642.11.1.el6.x86_64. FORTRAN programs are compiled using GFORTRAN from GNU Compiler Collection (GCC) version 4.4.7, which can be downloaded from <http://gcc.gnu.org/fortran>. The manual processing spreadsheet work is performed on PCs running the Windows 10 (64-bit) operating system and using Microsoft Office Excel 2016 (64-bit) from Microsoft Office 365 (64-bit).

USPS-FY16-20 includes electronic versions of all relevant programs, maps, and data files. The compiler used to run the PC-based FORTRAN programs can be downloaded freely from <http://gcc.gnu.org/wiki/GFortranBinaries>. Download the Windows 64-bit version of GFORTRAN. To compile use the command line: x86_64-pc-mingw32-gfortran.exe -O2 -ffixed-line-length-132 -finit-local-zero -fbounds-check -o {executable name} {program name.f}. The PC-based FORTRAN programs should be run in the same order as the programs are described below.

2. Preparation of the IOCS Clerk and Mail Handler Data

The following program extracts clerk and mail handler tallies from the 2016 IOCS data set and prepares the tallies for the volume-variable cost distribution for both mail processing and administration/window service costs for clerks and mail handlers as described in USPS-FY16-7.

Program: **cadoc16_prc.f** – Separates the clerk and mail handler tallies from the entire 2016 IOCS data set, separates the tallies between mail processing and administrative/window service, and assigns a cost pool to each tally using the method described in USPS-FY16-7.

Input: **FY16 IOCS Data** – Text flat file version of the submitted SAS IOCS nonpublic data set (USPS-FY16-NP21)
iocs2016_np.h – Declaration of IOCS tally fields
mods_fin16.prn – List of MODS 1&2 finance numbers used to identify MODS 1&2 offices (USPS-FY16-7)
costpools16.prn – Map of mail processing cost pools

Output: **clk_mh_mp16.dat** – IOCS mail processing tallies
clk_mh_aw16.dat – IOCS administrative and window service tallies

3. Cost Estimates – Clerks and Mail Handlers, Window Service

The following FORTRAN programs replicate the function of the window service and administrative cost distribution SAS programs documented in USPS-FY16-7. The results of these programs are exported into Microsoft Office Excel where final results are summarized and reported.

Program: **admwin_set.f** – Prepares administration and window service IOCS tallies for the cost estimation program. Converts tally dollar values (F9250) to cost pool dollars and assigns the tally to a CAG category.

Input: **fincag.16** – List of tally finance numbers and CAG
iocs2016_np.h – Declaration of IOCS tally fields
clk_mh_aw16.dat – IOCS administrative and window service tallies

Output: **admwin16.dat** – Administrative and window service tallies used for the cost estimation for all office types

Program: **admwin2a.f** – Estimates the window service costs for clerks and mail handler tallies by activity code

Input: **iocs2016_np.h** – Declaration of IOCS tally fields
actv_intl_win16.prn – List of the direct and class specific mixed mail activity codes
admwin16.dat – Administrative and window service tallies used for the cost estimation for all office types

Output: **windist16.data** – Estimated window service costs by activity code

Program: **sumclass_win.f** – Rolls up the window service cost estimates from activity code to subclass

Input: **actv_intl_win16.prn** – List of activity codes and corresponding subclass category codes
classes_win16.prn – List of CRA subclasses
windist16.data – Estimated window service costs by activity code

Output: **wincost16.csv** – Window service cost estimates for First-Class Mail Presort, Standard Mail ECR, and Standard Mail Regular by shape

Workbook: **FY16 Window Service Costs.xls** – Calculates FY16 CRA window service (C/S3.2) costs by shape

Input: **wincost16.csv** – Window service cost estimates for First-Class Mail Presort, Standard Mail ECR, and Standard Mail Regular by shape
FY16 CRA Window Service Costs – CRA worksheet 3.2.1 and 3.2.2 (USPS-FY16-1, CS03.xls)
FY16 RPW Volumes – USPS-FY16-26
FY16 Piggyback factors by CRA cost segments - USPS-FY16-24
ECR HD/Saturation Adjustment Factor – USPS-FY16-26